

The Texas Commission on Environmental Quality (TCEQ, agency, or commission) adopts new §§297.200 - 297.210.

Sections 297.200 - 297.202 and §§297.205 - 297.210 are adopted *with changes* to the proposed text as published in the May 27, 2016, issue of the *Texas Register* (41 TexReg 3852). Section 297.203 and §297.204 are adopted *without changes* to the proposed text and, therefore, will not be republished.

Background and Summary of the Factual Basis for the Adopted Rules

In 2015, the 84th Texas Legislature passed House Bill (HB) 2031 and HB 4097. HB 2031 relates to the diversion, treatment, and use of marine seawater and the discharge of treated marine seawater and waste resulting from the desalination of marine seawater. HB 4097 addresses seawater desalination for industrial purposes.

In HB 2031, the legislature declared that: "With this state facing an ongoing drought, continuing population growth, and the need to remain economically competitive, every effort must be made to secure and develop plentiful and cost-effective water supplies to meet the ever-increasing demand for water." The legislature also declared that: "In this state, marine seawater is a potential new source of water for drinking and other beneficial uses. This state has access to vast quantities of marine seawater from the Gulf of Mexico." To that end, the legislature stated the purpose of HB 2031 was to "...streamline the regulatory process for and reduce the time required for and cost of marine seawater desalination."

These rules allow the regulatory process for the diversion of seawater or marine seawater and conveyance of treated marine seawater in the bed and banks to be expedited. These applications can be expedited because they do not require a determination of water availability and; consequently, do not require the extensive technical review associated with a water availability determination nor do they have to be processed in priority date order. Additionally, the statute requires the Texas Parks and Wildlife Department (TPWD) and the Texas General Land Office (GLO) to conduct a study to develop zones appropriate for the diversion of marine seawater. HB 2031 requires the TPWD and the GLO to submit a report to the commission that "must include recommended diversion zones for designation by the commission and recommendations for the number of points from which, and the rate at which, a facility may divert marine seawater." HB 2031 then requires the commission to adopt rules to designate appropriate diversion zones. The designation of diversion zones will also expedite the review of these applications.

In HB 2031, the legislature created new Texas Water Code (TWC), Chapter 18, to address marine seawater desalination projects. HB 2031 also amended TWC, §5.509, Temporary or Emergency Order Relating to Discharge of Waste or Pollutants; TWC, §5.551, Permitting Procedures; Applicability; TWC, §7.302, Grounds for Revocation or Suspension of Permit; TWC, §11.0237, Water Rights for Instream Flows Dedicated to Environmental Needs or Bay and Estuary Inflows; TWC, §11.082, Unlawful Use: Civil Penalty; TWC, §11.0842, Administrative Penalty; TWC, §11.121, Permit Required; TWC, §16.053, Regional Water Plans; and TWC, §26.0291, Water Quality Fee. In addition, HB

2031 amended Texas Health and Safety Code (THSC), Chapter 341, Subchapter C, by adding THSC, §341.0316, Desalination of Marine Seawater for Drinking Water, and repealed TWC, §16.060, Desalination Studies and Research.

TWC, §18.003(a), requires a person to obtain a permit to divert and use state water that consists of marine seawater if: 1) the point of diversion is located less than three miles seaward of any point located on the coast of this state; or 2) the seawater contains a total dissolved solids (TDS) concentration based on a yearly average of samples taken monthly at the water source of less than 20,000 milligrams per liter (mg/L). TWC, §18.003(b), creates an exemption from permitting to divert and use marine seawater if TWC, §18.003(a), does not apply. In addition, TWC, §18.005(c), requires a person to obtain a permit to discharge: 1) treated marine seawater into a natural stream in this state or a lake, reservoir, or other impoundment in this state; or 2) waste resulting from the desalination of treated marine seawater into the Gulf of Mexico.

HB 2031 also directs the commission to issue a bed and banks permit to convey treated marine seawater in any flowing natural stream or lake, reservoir, or other impoundment. The bill prohibits: 1) the discharge of treated marine seawater into a flowing natural stream and impoundment for conveyance purposes without a discharge permit issued under TWC, Chapter 18; and 2) the diversion of marine seawater and the discharge of waste resulting from the desalination of marine seawater in a bay and estuary under the expedited permit process as allowed by TWC,

Chapter 18. A person has the option to submit an application under TWC, Chapter 11 or 26 to seek a permit to divert or discharge in a bay or estuary.

Further, HB 2031 directs the commission to adopt rules to expedite permitting and related processes for the diversion of marine seawater and the discharge of both treated marine seawater and waste resulting from the desalination process, in accordance with TWC, Chapter 18. In addition, the bill requires the commission to establish reasonable measures to minimize impingement and entrainment associated with the diversion of marine seawater.

Finally, HB 2031 requires that the TPWD and the GLO conduct a study to identify zones in the Gulf of Mexico that are appropriate for the diversion of marine seawater and for the discharge of waste resulting from the desalination of marine seawater and for the commission to adopt rules designating diversion zones by September 1, 2020. Under TWC, §18.003(j) and §18.005(g), an applicant for a permit to divert marine seawater must consult with the TPWD and the GLO regarding the point(s) of diversion or discharge until such time as the commission adopts rules designating diversion or discharge zones.

HB 4097 relates to seawater desalination projects. This bill creates TWC, §11.1405, Desalination of Seawater for Use for Industrial Purposes, and TWC, §26.0272, Permits Authorizing Discharges from Certain Seawater Desalination Facilities; and amends TWC, §27.021, Permit for Disposal of Brine from Desalination Operations or Drinking

Water Treatment Residuals in Class I Injection Wells, and TWC, §27.025, General Permit Authorizing Use of Class I Injection Well to Inject Nonhazardous Brine from Desalination Operations or Nonhazardous Drinking Water Treatment Residuals, to address seawater desalination for industrial purposes.

TWC, §11.1405(a), requires a person to obtain a permit to divert and use state water that consists of seawater if: 1) the point of diversion is located less than three miles seaward of any point located on the coast of this state; or 2) the seawater contains a TDS concentration based on a yearly average of samples taken monthly at the water source of less than 20,000 mg/L. TWC, §11.1405(b) creates an exemption from permitting to divert and use seawater if TWC, §11.1405(a) does not apply. When a permit application is required, TWC, §11.1405(e) specifies that the application does not require a finding of water availability and TWC, §11.1405(f) requires the permit to be consistent with the commission's adopted environmental flow standards in 30 TAC Chapter 298, Environmental Flow Standards for Surface Water. TWC, §11.1405(h), directs the commission to adopt rules to expedite permitting and related processes for the diversion of seawater.

In October 2015, the commission held a stakeholder meeting to solicit comments regarding the implementation of HB 2031 and HB 4097. The executive director based these adopted rules on consideration of the comments received from the stakeholders, sound science and other public interest and relevant factors.

In corresponding rulemakings published in this issue of the *Texas Register*, the commission also adopts new sections in 30 TAC Chapter 39, Public Notice; 30 TAC Chapter 295, Water Rights, Procedural; and 30 TAC Chapter 318, Marine Seawater Desalination Discharges to implement HB 2031 and HB 4097.

Section by Section Discussion

Subchapter K: Desalination, Substantive

The commission adopts new Subchapter K in Chapter 297 to contain the approval criteria for a water right application to divert marine seawater and seawater and a water right application to convey treated marine seawater in the bed and banks of a watercourse. The commission must adopt rules to implement TWC, §11.1405 and Chapter 18. The commission specifically invited commenters to provide any relevant information that may differ from its proposed rules, which in the commenter's opinion would assist the commission in deciding on adopted rules for water right applications to divert marine seawater or seawater and for water right applications to convey treated marine seawater in the bed and banks of a watercourse. The commission invited comments on all aspects of the rules as they were proposed. The commission made various revisions to the proposed rules and added language in response to comments as noted in this preamble.

§297.200, Applicability

The commission adopts new §297.200 to describe the purpose of Subchapter K. Subchapter K is intended to provide the approval criteria for an authorization to divert

and use state water that consists of marine seawater or seawater and to convey treated marine seawater in the bed and banks of a watercourse. In response to comment, the commission added the phrases "for desalination," "diversion for desalination," and "solely for industrial use" to adopted §297.200 to clarify the scope and applicability of the subchapter.

§297.201, Definitions

The commission adopts new §297.201. The adopted section has definitions of terms that only apply to Subchapter K. In §297.201(1) the commission adopts a definition of "Marine seawater" consistent with TWC, §18.001(2). In response to comment the commission added the phrase "for desalination" to clarify the applicability of this subchapter. In §297.201(2) the commission adopts a definition of "Seawater" as water that is derived from a bay or arm of the Gulf of Mexico. In response to comment the commission added the phrase "for desalination and use solely for industrial purposes" to clarify that only water diverted solely for industrial purposes can be diverted from a bay or arm of the Gulf of Mexico.

§297.202, Approval Criteria for Diversion of Marine Seawater and Seawater

The commission adopts new §297.202. The adopted section sets out the approval criteria for a water rights application to divert marine seawater or seawater that will apply only to applications considered under Subchapter K. In §297.202, the commission adopts that an application for diversion of marine seawater or seawater may only be granted if the application conforms to the requirements in 30 TAC

§295.302 to ensure that the commission considers only applications that meet the requirements in its rules and the requirements of TWC, §18.002(a)(1). In response to comment the commission added the phrase "for desalination under this subchapter" to clarify that Subchapter K relates to desalination of marine seawater or seawater. In response to comment the commission added the word "water" and deleted the phrase "marine seawater," and also added the phrase "in accordance with the requirements set out in §297.205 of this title (relating to Determination of Total Dissolved Solids Concentration)" to adopted §297.202(2) to provide a cross-reference to the requirements to determine TDS for an application to which this subchapter applies. In response to comment the commission deleted the word "consulted" and added the phrase "provided documentation of the results of the consultation" to adopted §297.202(5) to clarify the information an applicant for a permit under this subchapter would need to provide regarding the applicant's consultation with the TPWD and the GLO.

§297.203, Water Availability

The commission adopts new §297.203 stating that a finding of water availability is not required for an application for a water right permit to divert marine seawater or seawater in accordance with TWC, §11.1405(e).

§297.204, Applicability of Environmental Flow Standards

The commission adopts new §297.204 stating that it will evaluate whether a water right application for diversion of marine seawater or seawater is consistent with the

commission's rules in Chapter 298. The new section allows the commission to include provisions in a water rights permit to divert marine seawater or seawater necessary to comply with the environmental flow standards in Chapter 298 rules in accordance with TWC, §11.1405(f) and (g).

In keeping with TWC, §11.1471, the commission's environmental flow standards in Chapter 298 provide for variable volumes of freshwater inflows to support a sound ecological environment in the receiving bay and estuary systems. To support this sound ecological environment, TWC, §11.1405 requires the commission to evaluate the diversions for desalination projects under that section for consistency with environmental flow standards as well as gives the commission the authority to include provisions in the permit necessary to comply with the environmental flow standards. In the most obvious scenario, such permit conditions would be important to ensure that a desalination facility is not pulling in a significant portion of the freshwater entering a receiving bay. Such a result would be in direct opposition to a primary purpose of the environmental flow standards to provide such freshwater to support a sound ecological environment in the receiving bay and estuary systems.

§297.205, Determination of Total Dissolved Solids Concentration

The commission adopts new §297.205 to specifically state that it will review water quality information submitted under §295.302(i) to ensure that any permit issued meets the requirements for an expedited permit under TWC, §11.1405(a)(2) and §18.003(a)(2). In response to comment the commission added a new §297.205(b) to

provide more specific requirements for water quality information submitted by an applicant. The new subsection states:

"(b) The monthly samples must be taken at the water source for each proposed diversion location over a period of at least one year, in accordance with applicable TCEQ Surface Water Quality Monitoring Procedures as amended. Procedures for analysis must be in accordance with the most recently published edition of the *Standard Methods for the Examination of Water and Wastewater*, 40 Code of Federal Regulations Part 136, or other reliable sources acceptable to the commission for total dissolved solids. Laboratory accreditation requirements are specified in Chapter 25 of this title (relating to Environmental Testing Laboratory Accreditation and Certification)."

The commission also re-lettered proposed subsection (b) to (c). The commission adopts §297.205(c) to ensure that if the application is an amendment to an existing water right, the commission's review of the application is in accordance with TWC, §11.122(b).

§297.206, Treatment of Diverted Marine Seawater and Seawater

The commission adopts new §297.206 to ensure that any permit issued under Chapter 295, Subchapter G, complies with TWC, §18.003(d).

§297.207, Diversion of Marine Seawater and Seawater

The commission adopts new §297.207 to ensure that the proposed point of diversion for an application submitted under Chapter 295, Subchapter G, is not located in a bay or estuary in accordance with TWC, §18.003(f) unless the diversion is for industrial use under TWC, §11.1405. In response to comment the commission added the words and phrases "desalination solely for" and "purposes" and deleted the word "use" to clarify that the only water that can be diverted from a bay or estuary under this subchapter is seawater for desalination solely for industrial purposes.

§297.208, Consideration of Water Conservation

The commission adopts new §297.208 to provide that the water conservation requirements for an application to divert marine seawater or seawater are those requirements under Chapter 295, Subchapter G. The commission adopts that the water conservation review would determine whether there are practicable alternatives, whether the amount requested in the application is reasonable and necessary and whether the applicant will use reasonable diligence to avoid waste and achieve water conservation. The commission adopts new §297.208(b) to provide that the contents of the water conservation plan are those required under §295.302. HB 2031, Section 1(a) states the purpose of the act is not to hinder efforts to conserve or develop other surface water supplies. Under TWC, §18.002(a)(1), TWC, Chapter 11 applies to a permit to divert marine seawater. In response to comment the commission added §297.208(b)(4) stating:

"(4) demonstrates compliance with applicable provisions, based on the proposed use,

in §295.9 of this title (relating to Water Conservation and Drought Contingency Plans)."

The commission added this new paragraph because the water conservation requirements for specific uses in §295.9 apply to permit applications under this section.

§297.209, Impingement and Entrainment

The commission adopts new §297.209 to require that an applicant for a water rights permit to divert marine seawater or seawater take reasonable measures to avoid impingement and entrainment in accordance with TWC, §18.003(h). In response to comment, the commission added language clarifying that the requirements apply to both permitted and exempt facilities. Specifically, the commission added new §297.209(a) to require all facilities to minimize impingement and entrainment as follows "(a) A person who diverts seawater or marine seawater shall employ reasonable measures to minimize impingement and entrainment." The commission added the word "must" and deleted the word "shall" in adopted §297.209(b) to make it clear that the written statement is a requirement for an application. The commission added new §297.209(c) to include the requirements of the written statement by adding the words and phrases "under subsection (b) of this section must include: (1) the location and depth of the proposed intake; (2) the timing of the proposed diversions; (3) the physical and performance specifications of the proposed diversion systems and screen barriers, including the size of the screen openings and the maximum flow-through screen velocity; and (4) documentation that the proposed combination of technologies,

management practices, and operational methods represent reasonable measures to minimize impingement and entrainment" and deleting "shall." The commission added new §297.209(d) to state the conditions under which an exempt facility would be presumed to be in compliance with requirements for impingement and entrainment

"(d) A person who diverts seawater or marine seawater to which §295.300(a) of this title (relating to Applicability) does not apply is presumed to be in compliance with subsection (a) of this section if: (1) the person submits to the executive director, with a copy to the Texas Parks and Wildlife Department, a written statement of the facility-specific measures that the person intends to implement at the proposed facility to minimize impingement and entrainment; (2) the written statement under paragraph (1) of this subsection includes the information and documentation required under subsection (c) of this section; (3) within 60 days of the later of the executive director's receipt and Texas Parks and Wildlife Department's receipt of the submittal under paragraph (1) of this subsection, the executive director does not indicate that the submittal is deficient by issuing comments or requesting additional information; and (4) the facility implements the measures described in the submittal under this subsection or, if applicable, the amended submittal under subsection (f) of this section." The commission added this new subsection to provide specific actions a person exempt from permitting can take to be presumed to be in compliance with subsection (a) to minimize impingement and entrainment. The commission added new §297.209(e) to clarify that a submittal under §297.209(d) may be required "(e) The executive director may require a person to make a submittal as described in subsection (d) of this section." The commission added new §297.209(f) and to allow a person to

amend a submittal under §297.209(d) or (e) "(f) If the executive director issues any comment or requests additional information relevant to any submittal under subsection (d) or (e) of this section, the person may amend its submittal up to two times beyond its initial submittal." This provision allows a person to come into compliance if a submittal is required. Finally, the commission added new §297.209(g) to add a 60 day time frame for the executive director's review "(g) The executive director shall review any submittal under subsection (d) or (e) of this section or amended submittal under subsection (f) of this section within 60 days of receiving it." This provision provides the person a timeline by which the executive director will review his or her submittal.

§297.210, Approval Criteria for an Application to Convey Treated Marine Seawater in the Bed and Banks

The commission adopts new §297.210. The adopted section sets out the approval criteria for a water rights application to convey treated marine seawater in the bed and banks that will apply only to applications considered under Subchapter K. In §297.210(1) - (3), the commission adopts that an application for conveyance of treated marine seawater may only be granted if the application conforms to the requirements in §295.305 to ensure that the commission considers only applications that meet the requirements in its rules and the requirements in TWC, §18.004(a) and (c). In §297.210(4) and (5), the commission adopts that its decision to grant an application to convey treated marine seawater in the bed and banks consider whether losses are reasonable and appropriate and whether the accounting plan has been approved by the

executive director. This will ensure that existing water rights are not affected by an application to convey treated marine seawater as the commission adopts in §297.210(6).

Final Regulatory Impact Analysis Determination

The commission has reviewed this rulemaking under Texas Government Code, §2001.0225, "Regulatory Analysis of Major Environmental Rules," and has determined that this rulemaking is not a "major environmental rule." The legislature enacted HB 2031, creating TWC, Chapter 18, which relates to marine seawater desalination, and HB 4097, creating TWC, §11.1405, relating to seawater desalination projects for industrial purposes. HB 2031 states that the purpose of the new law is to remain economically competitive in order to secure and develop plentiful and cost-effective water supplies to meet the ever-increasing demand for water. The legislature also stated that in this state, marine seawater is a potential new source of water for drinking and other beneficial uses, and that this state has access to vast quantities of marine seawater from the Gulf of Mexico. The legislature stated that the purpose of HB 2031 was to "...streamline the regulatory process for and reduce the time required for and cost of marine seawater desalination."

Therefore, the purpose of the rulemaking is not "to protect the environment or reduce risks to human health from environmental exposure," in a way that may "adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a

sector of the state" (Texas Government Code, §2001.0225(g)(3)). The purpose of this rulemaking is to establish the requirements for obtaining permits for the diversion and transport of marine seawater and the diversion of seawater. The adopted rules in Chapter 297 are for the development of plentiful and cost-effective water supplies to meet the ever-increasing demand for water and to streamline the process for these permits.

Even if this rulemaking was a "major environmental rule," this rulemaking meets none of the criteria in Texas Government Code, §2001.0225 for the requirement to prepare a full Regulatory Impact Analysis. This rulemaking is not governed by federal law, does not exceed state law, does not come under a delegation agreement or contract with a federal program, and is not adopted under the TCEQ's general rulemaking authority. This rulemaking is adopted under specific state statutes enacted in HB 2031 and HB 4097.

The commission invited public comment regarding the Draft Regulatory Impact Analysis Determination during the public comment period. No comments were received regarding the Draft Regulatory Impact Analysis Determination.

Takings Impact Assessment

The commission evaluated these adopted rules and performed an analysis of whether these adopted rules constitute a takings under Texas Government Code, Chapter 2007. The specific purpose of these adopted rules is to add procedures for the development

of plentiful and cost-effective water supplies to meet the ever-increasing demand for water and to streamline the process for these permits. The adopted rules would substantially advance this stated purpose by adding requirements for the diversion or transport of marine seawater under TWC, Chapter 18, and the diversion of seawater for industrial purposes under TWC, §11.1405.

The commission's analysis indicates that Texas Government Code, Chapter 2007, does not apply to these adopted rules because these rules do not impact private real property. In HB 2031, the legislature expressed that "In this state, marine seawater is a potential new source of water for drinking and other beneficial uses. This state has access to vast quantities of marine seawater from the Gulf of Mexico." For marine seawater, there are no permanent water rights, real property rights that have been granted for use of the water in the Gulf of Mexico. For seawater in a bay or arm of the Gulf of Mexico, very few water rights have been granted for this water. There is no potential for harm to other water rights by this rulemaking. The burden on private real property rights will be nonexistent or minimal because of the amount of water in the Gulf of Mexico, or a bay or arm of the Gulf of Mexico. Diversions of seawater in a bay or arm of the Gulf of Mexico are also limited to industrial water. Water for municipal and domestic needs will not be taken from this part of the Gulf of Mexico.

Consistency with the Coastal Management Program

The commission reviewed the adopted rulemaking and found that the adoption is subject to the Texas Coastal Management Program (CMP) in accordance with the

Coastal Coordination Act, Texas Natural Resources Code, §§33.201, *et seq.*, and therefore must be consistent with all applicable CMP goals and policies. The commission conducted a consistency determination for the adopted rules in accordance with Coastal Coordination Act Implementation Rules, 31 TAC §505.22 and found the adopted rulemaking is consistent with the applicable CMP goals and policies.

CMP goals applicable to the adopted rules include: 1) to protect, preserve, restore, and enhance the diversity, quality, quantity, functions, and values of coastal natural resource areas (CNRAs); and 2) to ensure sound management of all coastal resources by allowing for compatible economic development and multiple human uses of the coastal zone. CMP policies applicable to the adopted rules include those contained in 31 TAC §501.33(a). The adopted rules implement HB 2031 and HB 4097, which direct the TCEQ to regulate the diversion, treatment, and use of marine seawater and the discharge of treated marine seawater and waste resulting from the desalination of marine seawater through expedited permitting and related processes. In HB 2031, the legislature finds "...that it is necessary and appropriate to grant authority and provide for expedited and streamlined authorization for marine seawater desalination facilities, consistent with appropriate environmental and water right protections, ...". Since one of the purposes of the adopted rules is to protect coastal natural resources, the rules are consistent with the CMP goals and policies.

Promulgation and enforcement of these rules will not violate or exceed any standards identified in the applicable CMP goals and policies because the adopted rules are

consistent with these CMP goals and policies, because these rules do not create or have a direct or significant adverse effect on any CNRAs, and because one of the purposes of the adopted rules is to protect coastal and natural resources.

The commission invited public comment regarding the consistency with the CMP during the public comment period. No comments were received regarding the consistency with the CMP.

Public Comment

The commission held a public hearing on June 21, 2016, in Austin. The comment period closed on July 5, 2016. The commission received comments from AEM the Woodlands (AEM); Asociacion Amiga; Clean Water Action (CWA); Coastal Conservation Association Texas (CCA-Texas); EV Houston Newspaper (EVHN); Glenrose Engineering, Inc. (GEI); the Honorable A. R. Senac, Chambers County Commissioner, Precinct 4 (Commissioner Senac); San Marcos River Foundation (SMRF); Save Our Springs Alliance (SOS); Texas Conservation Alliance (TCA); TPWD; Viva! The Woodlands Magazine (Viva!); joint comments submitted by the Galveston Bay Foundation (GBF), National Wildlife Federation (NWF), and the Sierra Club Lone Star Chapter (Sierra Club); 41 individuals who submitted personalized comments through NWF; 940 individuals who submitted identical comments through NWF; 32 individuals who submitted personalized comments through the Sierra Club; and 1,299 individuals who submitted identical comments through the Sierra Club. The comments submitted by Commissioner Senac do not in any manner necessarily reflect the opinion of Chambers County

Commissioners Court or Chambers County.

TDA Marine Subcommittee and one individual supported the rules. Generally, AEM, Asociacion Amiga, CWA, CCA-Texas, EVHN, GEI, Commissioner Senac, SMRF, SOS, TCA, TPWD, Viva!, GBF, NWF, Sierra Club and 2,310 individuals supported the rules, but were concerned that the rules were not sufficiently protective. One individual was against the rule. TPWD, GBF, NWF, and Sierra Club suggested specific changes to the rulemaking as noted in the Response to Comments section of this preamble.

Response to Comments

General

Comment

AEM, Asociacion Amiga, CCA-Texas, Commissioner Senac, CWA, EVHN, GEI, SMRF, SOS, and Viva! commented that the rules should make explicitly clear that the commission has discretion to deny permit applications for facilities proposed to be located in inappropriate locations that would harm instream uses, water quality, or fish and wildlife habitats.

Response

The commission responds that the procedural requirements in Chapter 295, Subchapter G and the substantive requirements in Chapter 297, Subchapter K offer suitable safeguards for considering the appropriateness of the proposed locations

of facilities in keeping with the commission's jurisdiction and statutory requirements. No changes were made in response to this comment.

Comment

AEM, Asociacion Amiga, CCA-Texas, CWA, EVHN, GEI, SMRF, and Viva! commented that TWC, Chapter 11 is fully applicable to permits issued under the proposed rules, provides clear direction to the commission to assess impacts to instream uses, fish and wildlife habitats, and water quality. TWC, §§11.134(b)(3)(D), 11.147(b) and (e), 11.150, and 11.152 requires those assessments and provide discretion and broad authority for the commission to propose permit conditions to protect instream uses, fish and wildlife habitats, and water quality. Chapter 297, Subchapter K should expressly acknowledge that direction and authority.

Response

The commission responds that Chapter 295, Subchapter G and Chapter 297, Subchapter K already address impacts to instream uses, fish and wildlife habitats, and water quality, especially through the consideration of the environmental flow standards as set forth in §297.204. No changes were made in response to this comment.

Comment

SOS commented that TWC, Chapter 11 directs the commission to assess the effects on bays and estuaries and provides broad authority for the commission to impose permit conditions to protect instream uses, fish and wildlife habitat, and water quality. The proposed rules should be amended to expressly acknowledge that authority.

Response

The commission responds that Chapter 295, Subchapter G and Chapter 297, Subchapter K already take into account protection of instream uses, fish and wildlife habitats, and water quality, especially through the consideration of the environmental flow standards as set forth in §297.204. No changes were made in response to this comment.

Comment

TPWD commented that it is essential that fish and wildlife are protected from any detrimental effects of diversions and transport of developed waters associated with desalination projects.

Response

The commission acknowledges the comment. No changes were made in response to this comment.

Comment

One thousand, three hundred and twenty-nine individuals commented that water right permit applications for desalination must demonstrate compliance with all permitting requirements, including environmental rules and protections, other than requirements expressly made inapplicable by legislation passed in 2015.

Response

The commission responds that the permit applications for desalination must demonstrate compliance with the requirements set forth in Chapter 295, Subchapter G and Chapter 297, Subchapter K, which are in keeping with the commission's jurisdiction and statutory requirements. No changes were made in response to this comment.

§297.200, Applicability

Comment

TPWD commented that §297.200 should be clarified as follows: "This subchapter only applies to diversion and use of seawater for desalination solely for industrial purposes, diversion for desalination and use of marine seawater, and conveyance of treated marine seawater in the bed and banks of a watercourse. The requirements for an application to divert marine seawater and seawater and to convey treated marine seawater in the bed and banks of a watercourse are in Chapter 295, Subchapter G of this title (relating to Desalination, Procedural)."

GBF, NWF, and Sierra Club commented that the limitation on the scope of this subchapter as applying only to diversions for desalination should be expressly noted in the rule language in order to accurately define the applicability of this subchapter. Similarly, the limited scope of authorizations of diversions of seawater pursuant to HB 4097 also should be acknowledged. These commenters recommended that §297.200 be revised as follows: "This subchapter only applies to diversion and use of seawater for desalination solely for industrial use, diversion for desalination and use of marine seawater, and conveyance of treated marine seawater in the bed and banks of a watercourse. The requirements for an application to divert marine seawater and seawater and to convey treated marine seawater in the bed and banks of a watercourse are in Chapter 295, Subchapter G of this title (relating to Desalination, Procedural)."

Response

The commission agrees that the rule could be clarified and revised §297.200 in response to these comments.

§297.201, Definitions

Comment

GBF, NWF, Sierra Club, and TPWD commented that the definitions in §297.201 should be clarified. GBF, NWF, and Sierra Club commented that because of the differences between HB 2031, which applies to all diversions for desalination from the Gulf of Mexico, and HB 4097, which applies only to diversions for desalination for industrial use from a bay or arm of the Gulf of Mexico, a careful distinction is necessary in the

rules. That distinction is not sufficiently clear in the proposed rules. First, the definitions of "Marine seawater" and "Seawater" should be expressly limited by referring to diversions for desalination. By including that limitation in the definitions, it is not necessary to repeat it throughout the rule text. Second, because the term "Marine seawater" is used to refer to diversions subject to HB 2031, that definition should include water from the Gulf diverted for desalination. By contrast, because the term "Seawater" is used to refer to diversions subject to HB 4097, which has limited applicability, that definition should only include water from a bay or arm of the Gulf of Mexico diverted for desalination solely for industrial use. By limiting the definitions in this way, both pieces of legislation can be given effect and the rules will be easier to interpret. GBF, NWF, Sierra Club, and TPWD recommend that the definitions be revised as follows:

"The following words or phrases have the following meanings in this subchapter unless the context clearly indicates otherwise:

"(1) Marine seawater--Water that is derived from the Gulf of Mexico for desalination.

"(2) Seawater--Water that is derived from a bay or arm of the Gulf of Mexico for desalination and use solely for industrial purposes."

Response

The commission agrees that the rule could be clarified and revised §297.201 in response to these comments.

§297.202, Approval Criteria for Diversion of Marine Seawater and Seawater

Comment

AEM, Asociacion Amiga, CCA-Texas, CWA, EVHN, GEI, SMRF and Viva! commented that §297.202(4) could be amended to acknowledge that the public welfare inquiry includes consideration of whether the proposed locations for diversion facilities are appropriate.

Response

The commission responds that the procedural requirements in Chapter 295, Subchapter G and the substantive requirements in Chapter 297, Subchapter K offer suitable safeguards for considering the appropriateness of the proposed locations of the facilities in keeping with the commission's jurisdiction and statutory requirements. No changes were made in response to this comment.

Comment

TPWD commented that §297.202 should be revised and clarified as follows:

"The commission may grant an application for a water right to divert marine seawater or seawater for desalination under this Subchapter only if:

"(2) for an application to divert seawater solely for use for industrial purposes, the point of diversion is located less than three miles seaward of any point located on the coast of this state; or the marine seawater contains a total dissolved solids concentration based on a yearly average of samples taken monthly at the water source of less than 20,000 milligrams per liter. The monthly samples shall cover a continuous period of not less than one year with samples taken at approximately the same time in each month in order to provide a representative characterization and shall be collected using protocols for sample collection, including for depth of collection, that are consistent with best practices as reasonably determined by commission staff.

"(5) the applicant has documented, in its application, the results of its completed consultation with the Texas Parks and Wildlife Department and the Texas General Land Office regarding the location of diversion facilities;"

GBF, NWF, and Sierra Club commented that because the commission has discretion on whether to grant a permit and because this section establishes limitations on that discretion rather than a directive, the rule should refer to when the commission "may" grant an application rather than to when the commission "shall" grant an application. There is an important distinction between HB 2031 and HB 4097 in terms of limitation on authority of the commission to grant a permit. Only HB 4097, in TWC, §11.1405, imposes a limitation on commission authority to grant a permit based on location less than three miles seaward of any point on the coast or on average salinity levels of less than 20 parts per thousand. That limitation applies only for applications for

desalination for industrial use. By contrast, HB 2031, in TWC, §18.003, establishes locations where a permit is required and where an exemption can apply. However, it places no limitation on commission authority to issue a permit outside of a bay or estuary. Accordingly, the rule should not place such a limitation on commission authority. It seems unlikely that a person will apply for a permit instead of an exemption but the rules should not preclude that option when the statute does not. As discussed earlier, the rules should further clarify how the determination will be made of when a diversion or discharge three miles seaward of any point on the coast will be determined, either by including a map or by further refining the rule language. The rules should also ensure that the commission will have the benefit of the results of the consultation process in its consideration of a permit application rather than just confirmation that the consultation occurred. Finally, the explicit limitation of TWC, §18.003(f) on diversions from a bay or estuary should be acknowledged for all applications that do not seek to divert seawater solely for industrial use. These commenters recommended that §297.202 be revised as follows and recommend a new §297.202(8):

"The commission may grant an application for a water right to divert marine seawater or seawater for desalination under this Subchapter only if:

"(2) for an application to divert seawater solely for industrial use, the point of diversion is located less than three miles seaward of any point located on the coast of this state, which includes any point located on a barrier island and any point located

on an imaginary line drawn between the most seaward points of land on either end of a pass or cut between barrier islands; or the marine seawater contains a total dissolved solids concentration based on a yearly average of samples taken monthly at the water source of less than 20,000 milligrams per liter;

"(5) the applicant has documented, in its application, the results of its consultation with the Texas Parks & Wildlife Department and the Texas General Land Office regarding the location of diversion facilities;

"(6) the application addresses a water supply need in a manner that is consistent with the state water plan and the relevant approved regional water plan unless the commission determines that new, changed, or unaccounted for conditions warrant waiver of this requirement;

"(7) the applicant has provided evidence that reasonable diligence will be used to avoid waste and achieve water conservation as defined by §297.1 of this title (relating to Definitions); and

"(8) for an application other than an application to divert seawater solely for desalination for industrial use, only if no proposed point of diversion is located in a bay or estuary."

Response

The commission responds that if an application meets the requirements in Chapter 295, Subchapter G and Chapter 297, Subchapter K the application should be granted. Therefore, the commission declines to substitute "may" for "shall." Any permit issued under this subchapter, regardless of whether the permit is for diversion for desalination of marine seawater or diversion for desalination of seawater solely for industrial use would be for a location that is less than three miles seaward of any point located on the coast of this state as required by HB 2031 and HB 4097. In addition, any permit issued under this subchapter would be issued in locations where the TDS concentration based on a yearly average of samples taken monthly at the water source of less than 20,000 mg/L. The commission intended for §297.202(2) to apply to both marine seawater and seawater and has changed the reference to marine seawater to water to clarify its intent. The commission has also revised this section to reference adopted §297.205, which includes the requirements for determining TDS concentration. The commission has also revised §297.202(5) to require documentation of the results of the consultation consistent with adopted §295.302(k). Finally, the commission responds that under HB 4097 and adopted §295.302(e), only seawater diverted for desalination solely for industrial use can be diverted from a bay or estuary. Therefore the commission declines to add a new §297.202(8).

§297.204, Applicability of Environmental Flow Standards

Comment

TPWD commented that it appreciates that the commission will evaluate whether the application is consistent with environmental flow standards. If the desalination projects are diverting from off-shore or near-shore marine or tidally influenced areas, the diversions will likely have no impact on the standards, which were developed to address impacts from freshwater riverine diversions. This is especially true due to the water availability model-based manner TCEQ currently uses to evaluate and measure compliance with freshwater inflow standards. Seawater diversions have the potential to alter localized salinities which could be exacerbated by riverine freshwater inflow patterns and diversions. Impacts of desalination projects on water physicochemical components, if located in bays and estuaries, should be determined and considered in TCEQ's analyses of environmental impacts and compliance with the flow standards. TPWD comments that the rule should be revised as follows for consistency with TWC, §§11.1405, 11.147, 11.150, and 11.152:

"(a) The commission shall evaluate whether an application for a diversion of marine seawater or seawater under Chapter 295, Subchapter G of this title (relating to Desalination, Procedural) is consistent with any applicable environmental flow standards established under Texas Water Code Section 11.1471 and Chapter 298 of this title (relating to Environmental Flow Standards for Surface Water).

"(b) The commission shall include any provisions in a permit issued under Chapter 295, Subchapter G of this title that the commission considers necessary to comply with any applicable environmental flow standards established under Texas Water Code

Section 11.1471 and Chapter 298 of this title. (c) Pursuant to the assessments required by Texas Water Code Sections 11.147 (b) and (e), 11.150, and 11.152, the commission shall include in the permit, to the extent practicable when considering all public interests, those conditions other than those addressing consistency or compliance with environmental flow standards considered by the commission necessary to maintain water quality, fish and wildlife habitats, and instream uses."

GBF, NWF, and Sierra Club commented that the requirements in TWC, Chapter 11 apply to applications under this subchapter except to the extent that either HB 2031 or HB 4097 explicitly make a requirement inapplicable. Nothing in either piece of legislation makes environmental protection requirements inapplicable. HB 4097 includes a requirement for evaluation of consistency with applicable environmental flow standards. It is not clear that any environmental flow standards would be applicable in any strict sense because the flow standards establish flow requirements measured upstream of a bay or arm of the Gulf of Mexico. However, the commission could ensure that a diversion is not located or sized to deprive a bay of the benefit of inflows that flow standards are designed to protect by including permit conditions to achieve consistency with applicable flow standards since strict compliance would be extremely difficult, if not impossible, to assess. Regardless, however, TWC, §§11.147(b) and (e), 11.150, and 11.152 do apply to applications under this subchapter. Because permit conditions will not involve environmental flow conditions but rather other types of protections such as diversion location, directional orientation, depth, diversion rate, diversion timing, and the like, nothing in TWC, §11.147(e-3) limits the applicability of

those statutory provisions. The rules should expressly acknowledge their applicability so that applications are aware that the issues must be addressed. These commenters recommended that §297.204(b) be revised and a new subsection (c) be added as follows:

"(b) The commission shall include any provisions in a permit issued under Chapter 295, Subchapter G of this title that the commission considers necessary to comply or achieve consistency with any applicable environmental flow standards established under Chapter 298 of this title.

"(c) After considering the assessments required by TWC Sections 11.147 (b) and (e), 11.150, and 11.152, the commission also shall include in the permit, to the extent practicable when considering all public interests, conditions other than those addressing consistency with environmental flow standards that are considered by the commission necessary to maintain water quality, fish and wildlife habitats, and instream uses. Permit conditions shall include requirements for measures to minimize impingement and entrainment consistent with Section 297.209 of this title (relating to Impingement and Entrainment)."

Response

The commission responds that the adopted environmental flow standards support the ecological productivity of Texas' bays and estuaries. Adopted §297.204 specifically requires inclusion in the permit of any permit conditions necessary to

comply with the applicable environmental flow standards under Chapter 298 and follows TWC, §11.1405 (f) and (g). The commission's objective or goal is to protect the adopted environmental flow standards, along with the interests of senior water right holders, in the water rights permitting process for new water rights subject to this subchapter.

§297.205, Determination of Total Dissolved Solids Concentration

Comment

AEM, Asociacion Amiga, CCA-Texas, CWA, EVHN, GEI, and SMRF commented that the rules should ensure that entities follow a reasonable protocol for sampling in establishing the yearly average of salinity samples taken monthly. The measurements must be collected evenly across a year to avoid concentrating samples in a non-representative manner. Standard sampling protocols should be mandated to ensure that samples are collected at an appropriate depth, or depths, to accurately characterize conditions at the location.

Response

The commission agrees that more specificity in this section would be helpful and revised the rule in response to this and other comments.

Comment

GBF, NWF, and Sierra Club commented that only TWC, §11.1405(a), which applies only for diversions for desalination for industrial use, establishes a maximum salinity level

as a prerequisite for permit issuance. TWC, §18.003(a) imposes a permit requirement, based on salinity level, but does not preclude a person from requesting and obtaining a permit even if a permit is not required based on salinity level. Accordingly, the rules should avoid establishing a maximum salinity criterion for permit issuance for diversions not limited solely to desalination for industrial use. These commenters recommended that §297.205(a) be revised as follows:

"(a) In its consideration of an application for a new or amended water right to divert seawater, the commission shall review the information required under §295.302(i) of this title (relating to Requirements for Diversion of Marine Seawater and Diversion of Seawater) and determine whether the application meets the requirements of Texas Water Code (TWC), §11.1405(a)(2)."

Response

The commission responds that it intends for all applicants for permits under this subchapter to provide water quality information as part of the application. The commission agrees that more specificity in this section would be helpful and revised the rule to include a new §297.205(b) to provide more specific requirements for water quality sampling.

§297.207, Diversion of Marine Seawater and Seawater

Comment

TPWD commented that §297.207 should be clarified as follows: "The commission shall review the information submitted under §295.302(c) of this title (relating to Requirements for Diversion of Marine Seawater and Diversion of Seawater) to ensure that the point of diversion is not located in a bay or estuary unless the application is for desalination solely for use for industrial purposes under Texas Water Code, §11.1405."

Response

The commission agrees that the rule could be clarified and revised §297.207 in response to this comment.

Comment

GBF, NWF, and Sierra Club commented that because this section deals only with ensuring that a permit is not granted for diversion in a bay or estuary except under limited circumstances, the section title should be clarified. In addition, because the exception under TWC, §11.1405 to the prohibition of granting a permit located in a bay or estuary is limited solely to desalination for industrial use, the rule language should reflect that specific limitation. A broader exception would violate TWC, §18.003(f). These commenters recommended that the title of §297.207 be changed to: "Diversion of Marine Seawater and Seawater from Bay or Estuary." These commenters also recommended that §297.207 be revised as follows: "The commission shall review the information submitted under §295.302(c) of this title (relating to Requirements for Diversion of Marine Seawater and Diversion of Seawater) to ensure that the point of

diversion is not located in a bay or estuary unless the application is solely for industrial use under Texas Water Code, §11.1405."

Response

The commission agrees that §297.207 could be clarified and revised the rule in response to other comments; however the commission declines to change the title of the section.

§297.208, Consideration of Water Conservation

Comment

GBF, NWF, and Sierra Club commented that the requirements of §295.9 of the commission's rules should be incorporated to ensure that basic requirements for water conservation for each type of proposed use are met. These commenters recommended that subsection (b) be revised to include this requirement as follows: "demonstrates compliance with applicable provisions, based on the proposed use, in §295.9 of this title (relating to Water Conservation and Drought Contingency Plans)."

Response

The commission agrees and added §297.208(b)(4) in response to this comment.

§297.209, Impingement and Entrainment

Comment

AEM, Asociacion Amiga, CCA-Texas, Commissioner Senac, CWA, EVHN, GEI, SMRF, and Viva! commented that the rules must prescribe minimum standards for impingement and entrainment that are required to be met for both permitted and exempt facilities. Minimum standards should include establishing a maximum allowable intake velocity. Stringent requirements should apply for facilities located in sensitive environments. AEM, Asociacion Amiga, CCA-Texas, CWA, EVHN, GEI, and SMRF also commented that less stringent, but still protective, requirements could apply to facilities located farther off-shore and in less sensitive areas and that the rules should include a requirement for installing a traveling screen that represents best technology available for reducing impingement.

Response

The commission agrees that desalination facilities must employ reasonable methods to minimize impingement and entrainment. The commission notes that §297.209 was revised in response to other comments to include a requirement that the applicant's written statement include documentation that its proposed combination of technologies, management practices, and operational measures represent reasonable measures to minimize impingement and entrainment. The commission agrees that exempt facilities also must address impingement and entrainment measures because HB 2031, in TWC, §18.003(h), provides that the commission shall adopt rules prescribing reasonable measures to minimize impingement and entrainment. This requirement is not limited to permitted facilities. Language has been added to §297.209 in response to this comment.

Additionally, exempt facilities are required to meet certain other requirements in the legislation, such as consultation with the TPWD and the GLO, and diverting water from diversion zones.

Comment

Two thousand, three hundred and eight individuals commented TCEQ's desalination rules should ensure that adequate minimum requirements for measures to protect fish, shellfish, and other animals, including early life stages, from being sucked against or into diversion facilities are defined in the rules for all facilities.

Response

The commission acknowledges the comment and notes that §297.209 was revised in response to other comments. No changes were made in response to this comment.

Comment

SOS commented that the proposed rules merely require applicants to propose measures for impingement and entrainment as part of a permit application and that the proposed rules should be revised to prescribe minimum standards for all permitted facilities and all exempt facilities.

Response

The commission agrees that desalination facilities must employ reasonable measures to minimize impingement and entrainment and has added express language to §297.209 in response to comments. The commission notes that §297.209 was revised in response to other comments to include more specific requirements for permitted facilities.

Comment

TCA commented that the rules should set standards for minimizing impingement and entrainment for all permitted facilities and for all exempt facilities, establishing a maximum allowable intake velocity, requiring installation of a high-tech traveling screen, and stringent requirements for facilities in or near sensitive environments such as estuaries and bays.

Response

The commission agrees that desalination facilities must employ reasonable measures to avoid impingement and entrainment and has added express language to §297.209 in response to comments. The commission notes that §297.209 was revised in response to other comments to include more specific requirements for permitted facilities. The commission agrees that exempt facilities also must address impingement and entrainment measures because HB 2031, in TWC, §18.003(h), provides that the commission shall adopt rules prescribing reasonable measures to minimize impingement and entrainment. This requirement is not limited to permitted facilities. Language has been added to §297.209 in response to this

comment. Additionally, exempt facilities are required to meet certain other requirements in the legislation, such as consultation with the TPWD and the GLO, and diverting water from diversion zones.

Comment

AEM, Asociacion Amiga, CCA-Texas, CWA, EVHN, GEI, SMRF, and Viva! commented that the rules must prescribe minimum standards for impingement and entrainment that are required to be met for both permitted and exempt facilities. Minimum standards should include establishing a maximum allowable intake velocity, such as 0.5 feet per second, along with a requirement for installing a traveling screen that represents best technology available for reducing impingement. Very stringent requirements should apply for facilities located in very sensitive environments like bays and estuaries, with less stringent, but still protective, requirements applying to facilities located farther off-shore and in less sensitive areas.

Response

The commission agrees that desalination facilities must employ reasonable measures to minimize impingement and entrainment and has added express language to §297.209 in response to comments. The commission notes that §297.209 was revised in response to other comments to include a requirement that the applicant's written statement include documentation that its proposed combination of technologies, management practices, and operational measures represent reasonable measures to minimize impingement and entrainment.

Comment

TPWD commented that it appreciates that an application to divert marine seawater or seawater is required to include a written statement of facility-specific, reasonable measures to minimize impingement and entrainment that will be implemented at the proposed desalination facility. TWC, §18.003(h) directs the TCEQ to prescribe reasonable measures to minimize impingement and entrainment. TPWD commented that the rule should be revised as follows: "An application to divert marine seawater or seawater under Chapter 295, Subchapter G of this title (relating to Desalination, Procedural) shall include a written statement of facility-specific, reasonable measures to minimize impingement and entrainment that will be implemented at the proposed desalination facility. At a minimum, such measures shall include an intake diversion designed and operated to result in a maximum flow-through screen velocity of 0.5 feet per second. At all times that diversions are occurring, the intake diversion facilities shall be equipped with screens resulting in individual openings no larger than 0.25 inches in size unless a combination of technologies, management practices, and operational measures representing the best technology available for impingement reduction are used to meet a specified impingement mortality standard. Measures to reduce entrainment include, but are not limited to, diversion from a suitable depth designed to avoid planktonic and larval organisms; timing of intake to coincide with periods of lower abundance of eggs and larvae in the water column; overall diversion of smaller quantities of water; and/or use of appropriate physical screen barriers and diversion systems employing a maximum screen mesh size of 0.04 in. Any permit

issued shall prescribe measures to be implemented to minimize impingement and entrainment consistent with this section."

GBF, NWF, and Sierra Club commented that TWC, §18.003(h) directs the commission to prescribe by rule reasonable measures to minimize impingement and entrainment. That requirement applies for both exempt and non-exempt facilities. The proposed rules fail to follow that specific statutory directive. As widely reflected in available technical literature, such measures will include both a diversion velocity component and a screen component. In addition, considerations, particularly for the screen component, for what measures are needed may vary by location of the diversion point. We have included that consideration in our recommended approach by providing that, when a diversion facility is proposed for a location that the TPWD and the GLO agree through the required consultation process is appropriate for a diversion, the project proponent can propose alternatives for the minimum screen component otherwise established in the rule. This recommended approach would comply with TWC, §18.003(h), would encourage permit applicants and proponents of exempt facilities to work with the consulting agencies to identify appropriate locations, and would help to protect the state's natural resources by imposing protective minimum requirements while retaining flexibility in appropriate circumstances. A person proposing an exempt facility would still be free to meet the minimum requirements of subsection (b) without obtaining any commission approval and subsection (d) would merely provide an additional option for proceeding. These commenters recommended that §297.209 be modified as follows:

"(a) An application to divert marine seawater or seawater under Chapter 295, Subchapter G of this title (relating to Desalination, Procedural) shall include a written statement of facility-specific, reasonable measures to minimize impingement and entrainment that the applicant proposes to implement at the proposed desalination facility.

"(b) Except as otherwise provided in subsection (c) of this section, reasonable measures to minimize impingement and entrainment shall include:

"(1) a maximum diversion velocity of .5 feet per second; and

"(2) a fine-mesh traveling screen system, with no larger than an .04 inch mesh opening, designed to operate continuously at all times diversions are occurring with a low-pressure wash system incorporating a mechanism for returning impinged organisms to the water source with minimal potential for abrasion.

"(c) If a permit application establishes that a diversion facility will be placed at a location agreed upon as appropriate for that purpose by the Texas Parks and Wildlife Department and the General Land Office through the consultation process required under subsection (k) of §295.302 of this title, an alternative to the screen system requirement set out in subsection (b)(2) of this section may be considered and approved by the commission for that diversion facility if the applicant demonstrates

that the alternative approach represents reasonable measures for minimizing impingement and entrainment for the specific diversion location.

"(d) If the documentation of the results of the consultation process submitted pursuant to subsection (c)(2) of §295.300 of this title establishes that a diversion facility will be placed in a location agreed upon as appropriate for that purpose by the Texas Parks and Wildlife Department and the General Land Office, an alternative to the screen system requirement set out in subsection (b)(2) of this section may be determined by the commission to represent reasonable measures for minimizing impingement and entrainment for that diversion facility based upon the submission by the owner or operator of the exempt facility pursuant to subsection (c)(3) of §295.300 of this title.

"(e) Any permit issued shall prescribe reasonable measures to be implemented to minimize impingement and entrainment consistent with this section and appropriate for the location of each diversion."

Response

The commission agrees that desalination facilities must employ reasonable measures to minimize impingement and entrainment and has added express language to §297.209 in response to comments. The commission agrees that more general requirements for an application can be included in §297.209 for impingement and entrainment and has revised §297.209 to include the type of

information that would need to be submitted with an application. However, the commission also notes that the appropriate measures to be taken to avoid impingement and entrainment should be specific to the facility and its location and it would be difficult to prescribe requirements for locations throughout the Texas Gulf Coast in this rulemaking. TWC, §18.003(i) requires the TPWD and the GLO to conduct a study to identify appropriate diversion zones, taking into account the need to protect marine organisms and submit the results of that study to the commission. The report will include diversion zones, and the number of points and the rate at which a facility can divert marine seawater.

§297.210, Approval Criteria for an Application to Convey Treated Marine Seawater in the Bed and Banks

Comment

GBF, NWF, and Sierra Club commented that because the commission has discretion on whether to approve an application and because this section establishes limitations on that discretion rather than a directive, the rule should refer to when the commission "may" grant an application rather than to when the commission "shall" grant an application. Although rare, there may be instances where water quality standards adopted by the United States Environmental Protection Agency could apply. Because HB 2031 only establishes minimum requirements, including a reference to compliance with applicable water quality standards without a specific reference to commission adoption ensures coverage in case that unusual circumstance were to occur. In addition, because treated marine seawater may flow through a number of streams or

impoundments, the rule should acknowledge that treatment levels must comply with applicable standards for all water bodies through which the treated marine seawater is proposed to be conveyed. The rule should also include an acknowledgement that the commission retains authority to require more stringent treatment if it is necessary to protect water quality. Although it may be unlikely that it will be needed, because the state does not have experience with the impacts of conveying treated marine seawater on water quality, the potential authority for requiring additional treatment, beyond the minimum levels required by statute, should be retained. These commenters recommended that §297.210 be revised as follows:

"The commission may grant an application for a water right to convey treated marine seawater in the bed and banks of a watercourse only if:

"(2) the marine seawater to be conveyed is treated so as to meet standards that are at least as stringent as the water quality standards applicable to any receiving stream or impoundment through which the water is proposed to be conveyed."

Response

The commission responds that if an application meets the requirements in Chapter 295, Subchapter G and Chapter 297, Subchapter K, the application should be granted. Therefore, the commission declines to substitute "may" for "shall." The commission agrees that marine seawater conveyed through a stream or impoundment would need to meet the water quality standards of all streams

through which the water is conveyed and has revised adopted §297.210(2) in response to this comment.

SUBCHAPTER K: DESALINATION, SUBSTANTIVE

§§297.200 - 297.210

Statutory Authority

The rules are adopted under Texas Water Code (TWC), §5.102, concerning General Powers, TWC, §5.103, concerning Rules, and TWC, §5.105, concerning General Policy, which authorize the commission to adopt rules as necessary to carry out its power and duties under the TWC; TWC, §5.013(a)(1), concerning the TCEQ's authority over water and water rights; TWC, Chapter 18, concerning Marine Seawater Desalination Projects; and TWC, §11.1405, concerning Desalination of Seawater for the Use of Industrial Purposes.

The adopted rules implement House Bill (HB) 2031 and HB 4097 (84th Texas Legislature, 2015).

§297.200. Applicability.

This subchapter only applies to diversion for desalination and use of marine seawater and diversion for desalination of seawater solely for industrial use and conveyance of treated marine seawater in the bed and banks of a watercourse. The requirements for an application to divert marine seawater and seawater and to convey treated marine seawater in the bed and banks of a watercourse are in Chapter 295, Subchapter G of this title (relating to Desalination, Procedural).

§297.201. Definitions.

The following words or phrases have the following meanings in this subchapter unless the context clearly indicates otherwise:

(1) Marine seawater--Water that is derived from the Gulf of Mexico for desalination.

(2) Seawater--Water that is derived from a bay or arm of the Gulf of Mexico for desalination and use solely for industrial purposes.

§297.202. Approval Criteria for Diversion of Marine Seawater and Seawater.

The commission shall grant an application for a water right to divert marine seawater or seawater for desalination under this subchapter only if:

(1) the application conforms to the requirements prescribed by §295.302 of this title (relating to Requirements for Application for Diversion of Marine Seawater and Diversion of Seawater) and is accompanied by the prescribed fee;

(2) the point of diversion is located less than three miles seaward of any point located on the coast of this state; or the water contains a total dissolved solids

concentration based on a yearly average of samples taken monthly at the water source of less than 20,000 milligrams per liter, in accordance with the requirements set out in §297.205 of this title (relating to Determination of Total Dissolved Solids Concentration);

(3) the diverted marine seawater or seawater is intended for a beneficial use and the marine seawater or seawater will be treated in accordance with applicable commission rules, based on the purpose for which the marine seawater or seawater is to be used, before it is used;

(4) the application is not detrimental to the public welfare;

(5) the applicant has provided documentation of the results of the consultation with the Texas Parks and Wildlife Department and the Texas General Land Office;

(6) the application addresses a water supply need in a manner that is consistent with the state water plan and the relevant approved regional water plan unless the commission determines that new, changed, or unaccounted for conditions warrant waiver of this requirement; and

(7) the applicant has provided evidence that reasonable diligence will be used to avoid waste and achieve water conservation as defined by §297.1 of this title (relating to Definitions).

§297.203. Water Availability.

The commission is not required to make a finding of water availability for an application under Chapter 295, Subchapter G of this title (relating to Desalination, Procedural).

§297.204. Applicability of Environmental Flow Standards.

(a) The commission shall evaluate whether an application for a diversion of marine seawater or seawater under Chapter 295, Subchapter G of this title (relating to Desalination, Procedural) is consistent with any applicable environmental flow standards established under Chapter 298 of this title (relating to Environmental Flow Standards for Surface Water).

(b) The commission may include any provisions in a permit issued under Chapter 295, Subchapter G of this title that the commission considers necessary to comply with the environmental flow standards established under Chapter 298 of this title.

§297.205. Determination of Total Dissolved Solids Concentration.

(a) In its consideration of an application for a new or amended water right to divert marine seawater or seawater, the commission shall review the information required under §295.302(i) of this title (relating to Requirements for Application for Diversion of Marine Seawater and Diversion of Seawater) and determine whether the application meets the requirements of Texas Water Code (TWC), §11.1405(a)(2) and §18.003(a)(2).

(b) The monthly samples must be taken at the water source for each proposed diversion location over a period of at least one year, in accordance with applicable TCEQ Surface Water Quality Monitoring Procedures as amended. Procedures for analysis must be in accordance with the most recently published edition of the *Standard Methods for the Examination of Water and Wastewater*, 40 Code of Federal Regulations Part 136, or other reliable sources acceptable to the commission for total dissolved solids. Laboratory accreditation requirements are specified in Chapter 25 of this title (relating to Environmental Testing Laboratory Accreditation and Certification).

(c) The assessment of any conditions upon a proposed amendment to a water right under this section shall be limited by §297.45(b) of this title (relating to "No Injury" Rule) as provided by TWC, §11.122(b).

§297.206. Treatment of Diverted Marine Seawater and Seawater.

The commission shall review the information submitted under §295.302(f) of this title (relating to Requirements for Application for Diversion of Marine Seawater and Diversion of Seawater) and determine whether the diverted marine seawater or seawater will be treated in accordance with applicable commission rules, based on the purpose for which the marine seawater or seawater is to be used.

§297.207. Diversion of Marine Seawater and Seawater.

The commission shall review the information submitted under §295.302(c) of this title (relating to Requirements for Application for Diversion of Marine Seawater and Diversion of Seawater) to ensure that the point of diversion is not located in a bay or estuary unless the application is for desalination solely for industrial purposes under Texas Water Code, §11.1405.

§297.208. Consideration of Water Conservation.

(a) Information in the water conservation plan provided by an applicant for a water right permit to divert marine seawater or seawater shall be considered by the commission in determining whether any practicable alternative exists, whether the requested amount is reasonable and necessary for the proposed use, and to ensure that reasonable diligence will be used to avoid waste and achieve water conservation.

(b) A water conservation plan submitted with an application requesting to divert marine seawater or seawater must include data and information which:

(1) supports the applicant's proposed use of marine seawater or seawater with consideration of the water conservation goals of the water conservation plan;

(2) evaluates conservation as an alternative to the proposed diversion of marine seawater or seawater;

(3) evaluates other feasible alternatives to new water development. It shall be the burden of proof of the applicant to demonstrate that the requested amount is necessary and reasonable for the proposed use; and

(4) demonstrates compliance with applicable provisions, based on the proposed use, in §295.9 of this title (relating to Water Conservation and Drought Contingency Plans).

§297.209. Impingement and Entrainment.

(a) A person who diverts seawater or marine seawater shall employ reasonable measures to minimize impingement and entrainment.

(b) An application to divert marine seawater or seawater under Chapter 295, Subchapter G of this title (relating to Desalination, Procedural) must include a written statement of the facility-specific, reasonable measures to minimize impingement and entrainment that will be implemented at the proposed desalination facility.

(c) The written statement under subsection (b) of this section must include:

(1) the location and depth of the proposed intake;

(2) the timing of the proposed diversions;

(3) the physical and performance specifications of the proposed diversion systems and screen barriers, including the size of the screen openings and the maximum flow-through screen velocity; and,

(4) documentation that the proposed combination of technologies, management practices, and operational methods represent reasonable measures to minimize impingement and entrainment.

(d) A person who diverts seawater or marine seawater to which §295.300(a) of this title (relating to Applicability) does not apply is presumed to be in compliance with subsection (a) of this section if:

(1) the person submits to the executive director, with a copy to the Texas Parks and Wildlife Department, a written statement of the facility-specific measures that the person intends to implement at the proposed facility to minimize impingement and entrainment;

(2) the written statement under paragraph (1) of this subsection includes the information and documentation required under subsection (c) of this section;

(3) within 60 days of the later of the executive director's receipt and Texas Parks and Wildlife Department's receipt of the submittal under paragraph (1) of this subsection, the executive director does not indicate that the submittal is deficient by issuing comments or requesting additional information; and

(4) the facility implements the measures described in the submittal under this subsection or, if applicable, the amended submittal under subsection (f) of this section.

(e) The executive director may require a person to make a submittal as described in subsection (d) of this section.

(f) If the executive director issues any comment or requests additional information relevant to any submittal under subsection (d) or (e) of this section, the person may amend its submittal up to two times beyond its initial submittal.

(g) The executive director shall review any submittal under subsection (d) or (e) of this section or amended submittal under subsection (f) of this section within 60 days of receiving it.

§297.210. Approval Criteria for an Application to Convey Treated Marine Seawater in the Bed and Banks.

The commission shall grant an application for a water right to convey treated marine seawater in the bed and banks of a watercourse only if:

(1) the application conforms to the requirements prescribed by §295.305 of this title (relating to Requirements for an Authorization to Convey Treated Marine Seawater in Bed and Banks) and is accompanied by the prescribed fee;

(2) the marine seawater to be conveyed is treated so as to meet standards that are at least as stringent as the water quality standards adopted by the commission and applicable to any receiving stream or impoundment through which the water is proposed to be conveyed;

(3) the treated marine seawater conveyed will only be used by the person to whom the authorization is granted;

(4) the estimate of the amount of treated marine seawater that will be lost to transportation, evaporation, seepage, channel or other associated carriage losses is reasonable and appropriate for the stream in which the treated marine seawater will be conveyed;

(5) the accounting plan submitted required by §295.305(d)(7) of this title has been approved by the executive director; and

(6) the application does not impair existing water rights or vested riparian rights.